



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,180	10/26/1999	JEAN-PAUL ACCARIE	1807.0804	2855
5514	7590	07/09/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			PHAN, TRI H	
ART UNIT	PAPER NUMBER			
2661	15			

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/427,180	ACCARIE, JEAN-PAUL
	Examiner Tri H. Phan	Art Unit 2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 April 2004.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,5,6,8,10-15,17,21,22,24,26-33,35-41 and 54-60 is/are pending in the application.  
 4a) Of the above claim(s) 2-4,7,9,16,18-20,23,25,34 and 42-53 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,5,6,8,10-15,17,21,22,24,26-33,35-41 and 54-60 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Response to Amendment/Arguments***

1. This Office Action is in response to the Response/Amendment filed on April 12<sup>th</sup>, 2004. Claims 2-4, 7, 9, 16, 18-20, 23, 25, 34 and 42-53 are now canceled and new claims 57-60 are added. Claims 1, 5-6, 8, 10-15, 17, 21-22, 24, 26-33, 35-41 and 54-60 are now pending in the application.

### ***Drawings***

2. The drawings were received on April 12<sup>th</sup>, 2004. These drawings are accepted by the Examiner.

### ***Claim Objections***

3. Claims 40-41 and 54-56 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

- In regard to claim 40, it recites the limitation “*network*” and the examiner is unclear and do not know whether the recitation(s) of the “*communication device*” (claim 17) such as receiver, determination unit and reformat unit, is (are) part of the claimed invention or not, i.e. “*network*” (claim 40); therefor, it is unclear what recitation(s) applicant is intending to encompass.

- Regarding claim 41, it recites the limitation “*computer*” and the examiner is unclear and do not know whether the recitation(s) of the “*communication device*” (claim 17) such as receiver,

determination unit and reformat unit, is (are) part of the claimed invention or not, i.e. “*computer*” (claim 41); therefor, it is unclear what recitation(s) applicant is intending to encompass.

- In regard to claim 54, it recites the limitation “*information storage device*” and the examiner is unclear and do not know whether the recitation(s) of the “*communication method*” (claim 1) such as receiving, determining, reformatting and transmitting, is (are) allowed implementation part of the claimed invention or not, i.e. “*information storage device*” (claim 40); therefor, it is unclear what method applicant is intending to encompass.

- Regarding claim 55, it recites the limitation “*information storage device*” and the examiner is unclear and do not know whether the recitation(s) of the “*communication method*” (claim 1) such as receiving, determining, reformatting and transmitting, is (are) allowed implementation part of the claimed invention or not, i.e. “*information storage device*” (claim 40); therefor, it is unclear what method applicant is intending to encompass.

- Regarding claim 56, it recites the limitation “*computer program*” and the examiner is unclear and do not know whether the recitation(s) of the “*communication method*” (claim 1) such as receiving, determining, reformatting and transmitting, is (are) allowed implementation part of the claimed invention or not, i.e. “*computer program*” (claim 40); therefor, it is unclear what method/process applicant is intending to encompass.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 56 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. Claim 56 is rejected under 35 U.S.C. 101 because the claims simply recite “computer program product” embodying a “computer program” for implementing the communication method according to Claim 1, which is not executed by a computer system, such as a microprocessor. For example, see *MPEP*, Section 2105-1 and <http://www.uspto.gov/web/offices/com/hearings/software/analysis/computer.html> under Section Non-Statutory Subject Matter of the claimed invention complies with 35 U.S.C. § 101.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-36 and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lo et al.** (U.S.6,324,178) in view of **Ludtke et al.** (U.S.6,233,611).

- In regard to claims 1 and 17, **Lo** discloses in Figs. 2A, 3A-B, 4 and in the respective portions of the specification that the device and method for transferring data between nodes (“*sharing data between communication units*”) of different data formats, i.e. between an IEEE

1394 communication domain and an Ethernet communication domain, via the bridge circuit (For example see Col. 1, Lines 40-52); wherein the 1394 interface controller circuit (“*reception operation*”) of the bridge circuit transmits and receives data packets (“*receiving digital information*”) in first data packets format (“*first format*”, ‘data packet compatible with the IEEE 1394 communication standard’) from the nodes 210-218 (“*communication units using first format*”) via the IEEE 1394 serial communication bus, e.g. “*first communication channels*”, (For example see Col. 4, Lines 47-64), the Ethernet controller circuit (“*transmission operation*”) of the bridge circuit transmits (“*transmitting digital information*”) and receives data packets in second data packets format (“*second format*”, ‘Ethernet data packet’) from the nodes 230-236 (“*communication units using the second format*”) via the Ethernet communication bus, e.g. “*second communication channels*”, (For example see Col. 4, Line 65 through Col. 5, Line 14), and the bridge circuit using the Bridge software (“*reformat operation*”) assembles data packets from one data format to another data format (“*reformatting the received digital information*”) for providing simultaneous bi-directional data flow and transferring data packets between different nodes and domains (For example see Fig. 2A; Col. 3, Lines 26-42; Col. 5, Lines 24-35; Col. 5, line 62 through Col. 6, Line 15; Col. 7, Lines 39-53). **Lo** does disclose about the method for managing network data transfers with the processor involvement as disclosed in Col. 7, Line 61 through Col. 8, Line 5; with the co-pending application, Ser. No. 09/085,395, incorporated by reference, now patented as U.S.6,185,607; (See Abstract); wherein, between the bridge circuit, the nodes in the first communication domain could be compatible with the IEEE 1394 standard or any communication standard assigned with node identification numbers and the nodes in the second communication domain could be compatible with the Ethernet IEEE 802.3 standard or

any communication standard assigned with different node identification numbers, e.g. MAC addresses or IP addresses; therefore, it is obvious that the bridge will determine the need to convert the data formats from one domain to another domain (“*determining the need to reformat the received digital information*”), whenever the packet sizes or node identifications between two protocols are different, e.g. different protocol formats, under the control of software (“*according to the different characteristic of the communication channels*”); For example see Fig. 2A-B; col. 4, line 47 through col. 5, line 35). However, **Lo** does not explicitly disclose about the resource allocation and management of the bridge circuit, such implementation is known in the art.

For example, **Ludtke** discloses about the device control module ‘DCM’ (“*determination operation*”), wherein the media manager checks to see if the appropriate devices are available and determines the necessity of the conversion from one format into another format (“*determining the need to reformat the received digital information*”; For example see Figs. 1-6; Abstract; col. 2, line 33-41; col. 3, lines 9-35), and if necessary, the media manager will control and manage the flow in order to complete the request task for the data transfer operation via the channels of the transmission bus, e.g. “*communication channels*”, through the use of applications and device control module for allocating and managing the available resources for the network devices and subdevices (For example see col. 6, line 19-42; col. 9, lines 26-39; col. 13, lines 18-23) even on the bus reset or change notification with new ID value.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to combine the invention as taught by **Ludtke**, by implement the device control module with the media manager and application program instructions as disclosed in Col. 4, Lines 12-67 into the program’s instructions in **Lo**’s system as disclosed in Col. 7, Lines 28-38;

with the motivation being to improve the ability to provide data flow management, services for client applications between devices on the network transfer data with different data formats between domains and protocols.

- Regarding claims 5-6, 14-15, 21-22 and 32-33, **Lo** does discloses about the method for managing network data transfers with the processor involvement as disclosed in Col. 7, Line 61 through Col. 8, Line 5; with the co-pending application, Ser. No. 09/085,395, incorporated by reference, now patented as U.S.6,185,607; (See Abstract); wherein, between the bridge circuit, the nodes in the first communication domain could be compatible with the IEEE 1394 standard or any communication standard assigned with node identification numbers (“*first transmission channel and identifier*”) and the nodes in the second communication domain could be compatible with the Ethernet IEEE 802.3 standard or any communication standard assigned with different node identification numbers, e.g. MAC addresses or IP addresses, (“*second transmission channel and identifier*”); therefore, it is obvious that the bridge will determine the need to convert the data formats from one domain to another domain (“*determination operation takes into account the transmission identifier*”), whenever the packet sizes or node identifications between two protocols are different, e.g. different protocol formats, under the control of software (For example see Fig. 2A-B; col. 4, line 47 through col. 5, line 35). However, **Lo** does not explicitly disclose about the resource allocation and management of the bridge circuit, such implementation is known in the art.

For example, **Ludtke** discloses about the device control module ‘DCM’ (“*determination operation*”), wherein the media manager checks to see if the appropriate devices are available

and determines the necessity of the conversion from one format into another format with different ID (“*determination operation takes into account the transmission identifier*”; For example see Figs. 1-6; Abstract; col. 2, line 33-41; col. 3, lines 9-35), and if necessary, the media manager will control and manage the flow in order to complete the request task for the data transfer operation via the channels of the transmission bus, e.g. “*communication channels*”, through the use of applications and device control module for allocating and managing the available resources for the network devices and subdevices (“*determination operation takes into account the bandwidth*”; For example see col. 6, line 19-42; col. 9, lines 26-39; col. 13, lines 18-23) even on the bus reset or change notification with new ID value, e.g. “*transmission identifier*”.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to combine the invention as taught by **Ludtke**, by implement the device control module with the media manager and application program instructions as disclosed in Col. 4, Lines 12-67 into the program’s instructions in **Lo**’s system as disclosed in Col. 7, Lines 28-38; with the motivation being to improve the ability to provide data flow management, services for client applications between devices on the network transfer data with different data formats between domains and protocols.

- In regard to claims 8 and 24, **Lo** further fails to explicitly disclose the method of “*stopping the reformatting performed on the received digital data having the first format*”. However, such implementation is known in the art.

For example, **Ludtke** further discloses about the method of “*detecting the information of the first format in order to reformat the transmission data*” (wherein, for example, the data flow manager in the media manager receives and analyzes the module ID value of the request for obtaining the topology map, then finds the appropriate data format for the transmission data as disclosed in Col. 11, Lines 15-51) and “*stopping the reformatting performed on the received digital data having the first format*” (wherein, for example, the data flow manager 64 in the media manager controls the operation of reformatting the received data as disclosed in Col. 11, Lines 49-57).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the method of “*stopping the reformatting performed on the received digital data having the first format*” as taught by **Ludtke** into the program’s instructions in **Lo**’s system as disclosed in Col. 7, Lines 28-38; with the motivation being to improve the ability for providing data flow management and services for client applications between devices on the network.

- Regarding claims 10-11 and 26-29, **Lo** further discloses “*the communication channel is in accordance with standard IEEE 1394*” (“*IEEE 1394.1 standard*”; For example see the IEEE 1394 communication bus 240 in Fig. 2A) and “*the first communication channel and the second communication channel are not merged*” (For example see the IEEE 1394 communication bus 240 and the Ethernet IEEE 802.3 communication bus 250 in Fig. 2A), but fails to disclose that “*the first communication channel and the second communication channel are merged*”. However, such implementation is known in the art.

For example, **Ludtke** discloses “*the first communication channel and the second communication channel are merged*” (wherein, for example, all the devices such as the video camera, the video cassette recorder, the set top box, the television, the computer are used in the channel of the IEEE 1394 communication bus 15-18 of Fig. 1; col. 1, lines 32-40).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the method of “*merging the first and second communication channel*” as taught by **Ludtke** into the **Lo**’s system with the motivation being to improve the ability for providing an open and flexible services for client applications between devices on the network by using the media manager as disclosed in col. 4, lines 59-67.

- In regard to claims 12 and 30, **Lo** further discloses the bridge circuit provides the bi-directional data flow between the nodes of the first and second communication domains (“*isolating flows between two buses*”) as disclosed in details of Fig. 2A, col. 5, lines 24-35; col. 5, line 62 through col. 6, line 8.

**Ludtke** also discloses the DCM manager 54 of the media manager controls the data flow (See Abstract) by grouping the devices and subdevices (For example see col. 6, lines 19-27) based on the abstraction service as disclosed in col. 7, lines 6-36.

- Regarding claims 13 and 31, **Lo** does discloses the transmission data between nodes with different data formats, i.e. between an IEEE 1394 communication domain and an Ethernet communication domain; wherein, between the bridge circuit, the nodes in the first communication domain could be compatible with the IEEE 1394 standard or any communication

standard and the nodes in the second communication domain could be compatible with the Ethernet IEEE 802.3 standard or any communication standard (For example see Figs. 4, 8A-B; wherein the data packet format is used with generic and asynchronous IEEE 1394 as disclosed in Fig. 8B). However, **Lo** does not explicitly disclose about the “*isochronous*” mode and it is obvious that the IEEE 1394 communication bus can support both isochronous and asynchronous format data transfer, and where the implementation such as the transmission over the isochronous and “*asynchronous*” format data transfer is known in the art.

For example, **Ludtke** discloses “*the transmission is performed in the isochronous and the other in asynchronous*” format data transfer as disclosed in col. 14, lines 45-50; col. 15, lines 21-27; over the IEEE 1394 serial bus which supports both isochronous and asynchronous data transfer as disclosed in col. 1, lines 15-20.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the method of “*the transmission is performed in the isochronous and the other in asynchronous mode*” as taught by **Ludtke** into the **Lo**’s system with the motivation being to improve the ability for providing an open and flexible services for client applications between devices on the network by using the media manager as disclosed in col. 4, lines 59-67.

- In regard to claims 35 and 36, **Lo** does discloses about the bridge circuit with simultaneous bidirectional communication flow, e.g. “*adapted to process several information flows in bidirection*” as disclosed in Fig. 2A; col. 5, lines 27-35, but fails to explicitly disclose

*“the communication means is adapted to process several information flows in parallel”.*

However, such implementation is known in the art.

For example, **Ludtke** discloses *“the communication means is adapted to process several information flows in parallel”* (wherein, for example, the event manager 62 broadcast the event notifications to all interested parties as disclosed in col. 9, line 59 through col. 10, line 10 over the IEEE 1394 serial bus which allows multiple applications to simultaneously transmit as specified in col. 1, lines 32-37).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement *“the communication means is adapted to process several information flows in parallel”* as taught by **Ludtke** into the **Lo**’s system with the motivation being to improve the ability for managing data flow between devices on the network through the IEEE 1394 serial bus, by using the media manager as disclosed in col. 4, Lines 59-67.

- Regarding claims 40-41, **Lo** further discloses in Figs. 2A-B, and in the respective portions of the specification for the network (For example see col. 1, lines 8-15), computer, display means, memory (Figs. 2A-B).

**Ludtke** further discloses in Figs. 1, 4, and in the respective portions of the specification for the network, computer, memory, display means, modem, camera, video recorder, and television receiver.

- In regard to claims 54-56, **Lo** also discloses in Figs. 4-5 and in the respective portions of the specification for the memory unit (“*information storage means*”) which can be read by a

computer or microprocessor storing instructions of a bridge software (“*computer program*”) as disclosed in col. 7, line 28 through col. 8, line 5.

**Ludtke** further discloses in Figs. 1, 4, and in the respective portions of the specification for the information storage means which is removable, partially or completely (floppy disk, memory which use to store the download program software (modules) as disclosed in col. 6, lines 51-64; col. 9, lines 40-58), and can be read and executed by a computer or microprocessor storing instructions of a computer program (For example see col. 4, lines 21-22) in order to manage data flow and format of data transfer, services for client applications on the general or specific devices on the network as disclosed in col. 2, lines 13-41.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to use *the removable, partially or completely information storage means uses to store the program software and can read, executes by the microprocessor* as taught by **Ludtke** into the **Lo**’s system as engineering choices for the desired information storage on the IEEE 1394 network.

8. Claims 37-39 and 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lo et al.** (U.S.6,324,178) in view of **Ludtke et al.** (U.S.6,233,611), further in view of **Tanno et al.** (U.S.6,064,772).

- In regard to claims 37-39, **Lo** does discloses the nodes (“*communication unit*”) in the first/second communication domain are used with the IEEE 1394 communication bus, but fails to explicitly disclose about the “*digital video, JPEG 2000, and MPEG2 standard formats*”.

**Ludtke** discloses the IEEE 1394 serial bus supports general and specific media devices such as video camera, video cassette recorder, set top box, television, etc. (See Figs. 1 and 4) for audio/video network as disclosed in Col. 1, Lines 60-66; wherein, the digital video, JPEG 2000, and MPEG2 standard formats are well known in the art for image coding method which can be downloaded and installed as disclosed in Col. 9, Lines 40-58; but fails to explicitly disclose about the “*digital video, JPEG 2000, and MPEG2 standard formats*”.

**Tanno** discloses in Figs. 1, 2, 5, and in the respective portions of the specification for “*the digital video, JPEG 2000, and MPEG2 standard formats are used over the communication means*” (IEEE 1394 standard bus in Fig. 1; Col. 3, Lines 49-58; Col. 5, Lines 23-33) and where the “JPEG 2000 standard format” is just another version of the JPEG standard.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to use “*the communication means is adapted with the digital video, JPEG, and MPEG2 standard formats*” as taught by **Tanno** into the combination of **Ludtke** and **Lo**’s system with the motivation being to specify the ability for using the well known coding format such as JPEG and MPEG over the communication bus such as IEEE 1394.

- In regard to claims 57-60, the combination of **Lo** and **Ludtke** does discloses the nodes (“*communication unit*”) in the first/second communication domains are used with the IEEE 1394 communication bus, which supports general and specific media devices such as video camera, video cassette recorder, set top box, television, etc. for audio/video network with different formats (For example see **Ludtke**: Figs. 1 and 4; col. 1, lines 60-66), but fails to explicitly disclose about the “*encryption unit*” and method for “*encrypting digital information*”.

**Tanno** further discloses about the device and method for coding/decoding a plurality of kinds of group compressed image data in the plurality of channels (“*encrypting digital information*”; For example see col. 4, lines 7-9; col. 7, line 32-34) through the use of the codec (“*encryption unit*”; For example see col. 9, lines 65-67), which is controlled by the file server (For example see Abstract; col. 3, lines 1-15).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to use “*the communication means is adapted with the digital video, JPEG, and MPEG2 standard formats*” as taught by **Tanno** into the combination of **Ludtke** and **Lo**’s system with the motivation being to specify the ability for using the well known coding format such as JPEG and MPEG over the communication bus such as IEEE 1394.

#### ***Response to Arguments***

9. Applicant's arguments filed on April 12<sup>th</sup>, 2004 have been fully considered but they are not persuasive.

In regard to claims 1 and 17, Applicant argues that the combination of **Lo** and **Ludtke** fails to disclose about the method of determining the need to reformat “*according the characteristic of the communication channels*”. Examiner respectfully disagrees. **Lo** does disclose about the method for managing network data transfers between the bridge circuit, wherein the nodes in the first communication domain could be compatible with the IEEE 1394 standard or any communication standard assigned with node identification numbers and the nodes in the second communication domain could be compatible with the Ethernet IEEE 802.3 standard or any communication standard assigned with different node identification numbers,

e.g. MAC addresses or IP addresses; therefore, it is obvious that the bridge will determine the need to convert the data formats from one domain to another domain (“*determining the need to reformat the received digital information*”), whenever the packet sizes or node identifications between two protocols are different, e.g. different protocol formats, under the control of software (“*according to the different characteristic of the communication channels*”; For example see Fig. 2A-B; col. 4, line 47 through col. 5, line 35). **Ludtke** discloses about the device control module ‘DCM’ (“*determination operation*”), wherein the media manager checks to see if the appropriate devices are available and determines the necessity of the conversion from one format into another format (“*determining the need to reformat the received digital information*”; For example see Figs. 1-6; Abstract; col. 2, line 33-41; col. 3, lines 9-35), and if necessary, the media manager will control and manage the flow in order to complete the request task for the data transfer operation via the channels of the transmission bus, e.g. “*communication channels*”, through the use of applications and device control module for allocating and managing the available resources for the network devices and subdevices (“*according to the different characteristic of the communication channels*”; For example see col. 6, line 19-42; col. 9, lines 26-39; col. 13, lines 18-23) even on the bus reset or change notification with new ID value. Therefore, Examiner concludes that the combination of **Lo** and **Ludtke** teaches the arguable features.

Claims 5-6, 8, 10-15, 21-22, 24, 26-33, 35-41 and 54-56 are rejected as in Part 7 and 8 above of this Office action and by virtue of their dependence from claims 1 and 17.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Takahashi et al.** (U.S.6,424,795) and **Elgamal et al.** (U.S.5,825,890) are all cited to show devices and methods for improving data transfers communication architectures over networks, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (703) 305-7444. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Olms can be reached on (703) 305-4703.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**

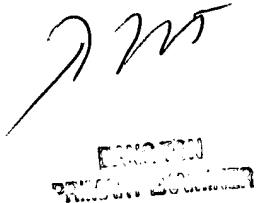
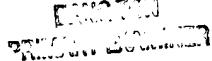
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-3900.

2004-06-21  
FBI LABORATORY  
COMM-FBI

Tri H. Phan  
June 21, 2004